

# Anxiety of Caught New Type Coronavirus (Covid-19) in Professional Soccer Players

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## Abstract

The aim of this study was to investigate the anxiety of catching a new type of coronavirus (Covid-19) in professional soccer players. 188 including 42 professional soccer players from the Turkish Super League, 32 players from the TFF 1st League, 41 players from the 2nd League, and 73 players from the 3rd League were voluntarily participated in this study. Average age of the players is  $25.04 \pm 4.831$  years; average height of the players is  $180.11 \pm 6.246$  cm; average body weight of the players is  $75.23 \pm 6.118$  kg; average sports age of the players is  $12.82 \pm 4.256$  years. In this study evaluating the anxiety of professional soccer players about catching Covid-19, the level of anxiety of soccer players about getting Covid-19 was compared according to the status of being caught and not caught, the leagues they played and their game positions. No significant difference was found in the cases of the soccer players catching or not getting Covid-19. The change between the leagues in which the players play does not make any sense. When the anxiety of catching Covid-19 was examined according to the playing positions, a statistical significance was found in the comparison of the social anxiety scores according to the positions played by the players. In conclusion, while there was no significant relationship between the soccer players catching and not getting Covid-19, and their anxiety about catching Covid-19 for the leagues they played, the anxiety levels of catching Covid-19 were statistically significant to the game positions.

**Key Words:** Covid-19, Soccer, Anxiety, Pandemia

## Özet

Bu çalışmanın amacı, profesyonel futbolcularda yeni tip koranavirüse (Covid-19) yakalanma kaygısını araştırılmasıdır. Çalışmaya, yaşları ortalaması  $25,04 \pm 4,831$  yıl, boyları ortalaması  $180,11 \pm 6,246$  cm, vücut ağırlıkları ortalaması  $75,23 \pm 6,118$  kg, spor yaşları ortalaması  $12,82 \pm 4,256$  yıl olan ve Türkiye Süper Liginden 42, TFF 1. Liginden 32, 2. Ligden 41, 3. Ligden 73 profesyonel futbolcu gönüllü olarak katılmıştır. Profesyonel futbolcuların Covid-19'a yakalanma kaygısının değerlendirilmesi amacıyla yapılan bu çalışmada, futbolcuların Covid-19'a yakalanma ve yakalanmama durumları, oynadıkları ligler ve oyun pozisyonlarına göre Covid-19'a yakalanma kaygı düzeyleri karşılaştırılmıştır. Futbolcuların Covid-19'a yakalanma ve yakalanmama durumlarında anlamlı bir fark bulunmamıştır ( $P>0,05$ ). Futbolcuların oynadıkları ligler arası değişimin herhangi bir anlamlılık oluşturmamaktadır. Oyun pozisyonlarına göre Covid-19'a yakalanma kaygıları incelendiğinde sosyal kaygı puanlarının futbolcuların oynadıkları mevkilere göre karşılaştırılmasında, istatistiksel bir anlamlılık bulunmuştur ( $P<0,05$ ). Sonuç olarak, futbolcuların Covid-19'a yakalanma ve yakalanmama durumları, oynadıkları ligler için Covid-19'a yakalanma kaygıları arasında anlamlı bir ilişki bulunmazken oyun pozisyonlarına göre Covid-19'a yakalanma kaygı düzeyleri istatistiksel olarak anlamlı bulunmuştur.

**Anahtar Kelimeler:** Covid-19; Futbol ; Kaygı; Pandemi.

## INTRODUCTION

The spread of the new type of coronavirus (Covid-19), emerging towards the end of 2019, happened by a unexpected speed all over the world. Millions of people worldwide have become infected with Covid-19 and died (19). Covid-19 has infected more than 186 million people in more than 200 countries around the world, causing nearly 4 million deaths as of July 2021. (16). As a result of the increase of Covid-19 worldwide and the occurrence of the pandemic process, the World Health Organization (WHO) has declared a "Public Health Emergency". As the pandemic spreads all over the world, the accompanying fears and anxieties also spread (19). Ornell et al. (17) revealed that the fear caused by a pandemic could increase the levels of stress and anxiety in a healthy individual. Moreover, it might increase them in the individuals with pre-existing psychological disorders. Johnson & Mueller (11) stated in their study that catching a virus or bacterial infection had some consequences including worry, anxiety and fear. Furthermore, examining the studies related to Covid-19, it can be stated that psychological and emotional symptoms, including panic, anxiety and stress, rise (7, 12, 4). Covid-19 has affected sports as well as many areas. In many countries, sports competitions had to be postponed, played without spectators or even cancelled. Athletes under quarantine, coaches and managers, canceled sports competitions, postponed organizations were faced with many negative situations. The world of sports has encountered many adverse conditions consisting of quarantined athletes, coaches and managers, canceled matches, postponed organizations, and others (23). Suspensions of sports activities, cancellation or postponement of organizations have also negatively affected the athletes psychologically and socially (21,18). Increasing cases have also increased the anxiety of catching Covid-19 in athletes (9). Consequentially, it is predicted that the anxiety of catching Covid-19 in athletes may affect their performance in sports competitions. The interruption of the training processes of the athletes due to the new type of COVID-19, the fear of poor performance, the anxiety, the stress and the emotional confusion resulted by the epidemic also influence the anxiety levels (3). In spite of all the negative statements about anxiety, it is known that if the anxiety level is kept optimal, it will affect performance positively. Yerkes & Dodson (26) theorized that the relationship between anxiety-arousal and performance is not linear but inverted U-

shaped. Therefore, the aim of this study is to examine the anxiety of catching the new type of coronavirus (covid-19) in professional soccer players.

## METHOD

### Subjects

A total of 188 soccer players, 23 goalkeepers, 30 central defenders, 37 full-backs, 63 central midfielder, 17 side midfielder and 18 forwards were examined. These soccer players were playing in different leagues of Turkey 42 professional soccer players from Turkish Super League, 32 professional soccer players from TFF 1st League, 41 professional soccer players from 2nd League, 73 professional soccer players from 3rd League voluntarily participated in the study. The mean age was  $25.04 \pm 4.831$  years, height was  $180.11 \pm 6.246$  cm, body weight was  $75.23 \pm 6.118$  kg, and sports age was  $12.82 \pm 4.256$  years. The study was approved by an ethics board and met the conditions of the Helsinki Declaration. The study protocol was also approved by the Board of Ethics of the Selcuk University, Sport Science Faculty in Konya.

### Procedures

Survey method was used as data collection tool in the study. Questionnaire prepared by the Tekkursun et al. (24) consisted of two sections. 'Personal Information Form' in the first part and 'Athletes Anxiety of Caught New Type of Coronavirus (Covid-19) Inventory' in the second part were located. Questions were prepared by using 'Google Forms' so that it helps the soccer players reach to the questionnaires easier. Introductory text of the questionnaire and online form link were sent to the soccer players through e-mail and text message. Questionnaire remained as open access for three weeks, the questionnaire then was stopped when data entry was over and data set was made ready for the statistical analysis.

### Personal Information Form

Participants were asked to respond the questions such as age, size, body weight, sports (soccer) age, the status of being caught in the Covid-19 outbreak, playing position, league played during coronavirus.

### Athletes Anxiety of Caught New Type of Coronavirus (Covid-19) Inventory

It is a Likert type self-assessment inventory created by Tekkursun et al. (24) consisted of 15 questions and scored between 1-5. There are individual anxiety (item: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11),

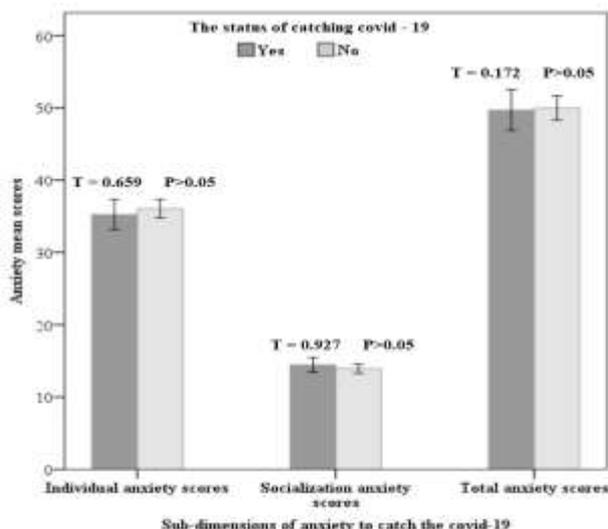
socialization anxiety (item: 12, 13, 14, 15) and total score subscales. Each item contains five short answer options to assess severity. It is a 5-point Likert type scale. Evaluation is made as; 1 'I don't agree at all' - 2 'I do not agree' - 3 'I am undecided' - 4 'I agree' - 5 'I totally agree'. Validity and reliability study Tekkursun et al. (2020) found the Cronbach Alpha reliability (internal consistency) score of the individual anxiety subscale to be 0.90, Cronbach Alpha reliability (internal consistency) score of the socialization anxiety subscale to be 0.84 and Cronbach Alpha reliability (internal consistency) score of the total anxiety score subscale to be 0.92.

### Statistical Analyses

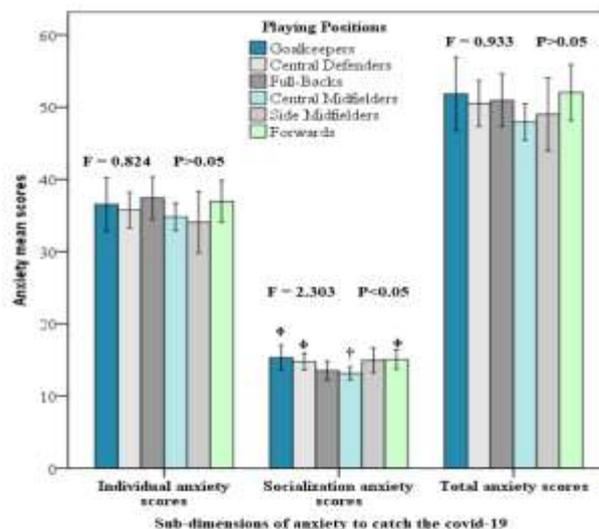
SPSS IBM 22 Statistics program were used for statistical analysis. The continuous variables of the

study are presented in mean ± standard deviation and categorical variables were presented in frequency (percentage). The Kolmogorov Smirnov test was applied to examine whether the variables show normal distribution. Independent Samples T test was used to determine the differences between social anxiety and total anxiety score with the situation of caught Covid-19. Mann-Whitney U test was used to determine the differences between individual anxiety and the situation of caught Covid-19. In addition, the ANOVA test was used to comparative of the scores obtained from the subscales of the Athletes Anxiety of Caught New Type of Coronavirus (Covid-19) Inventory according to the playing positions and league levels. The data obtained in this study were tested at a confidence interval of 0.95.

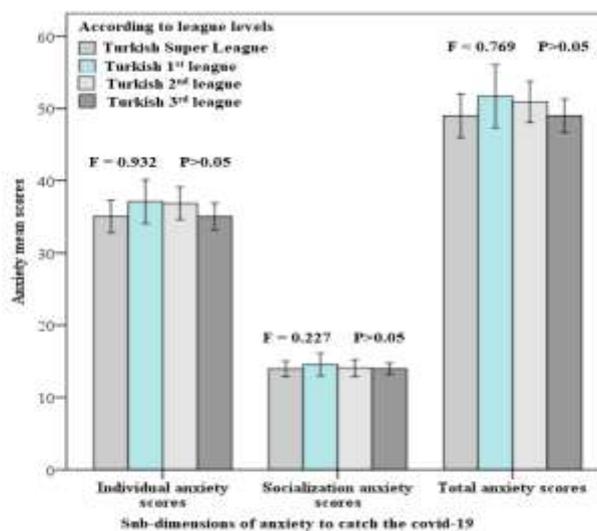
### RESULTS



Graphic 1. Comparison the soccer players' of anxiety to catch the covid - 19 according to the status of catching covid - 19.



Graphic 2. Comparison the soccer players' of anxiety to catch the covid-19 according to playing positions.



Graphic 3. Comparison the soccer players' of anxiety to catch the covid-19 according to league levels.

We found that aren't significantly differences according to status of catching covid-19 and playing league in sub-dimensions of anxiety to catch the covid-19 (Graph 1 and 3). At the same time, when the individual anxiety and total anxiety scores of the football players were compared according to the playing positions of the footballers, it was found that there was no significant difference. On the other hand, the socialization anxiety scores of the central midfielders, which is one of the sub-dimensions catching of the Covid-19, were found to be lower than the socialization scores of the goalkeepers, center defenders and strikers (Graph 2).

## DISCUSSION

In this study aiming to investigate the anxiety of professional soccer players about catching the COVID-19, no difference was found in terms of individual, social and total anxiety scores between soccer players who have been caught with Covid-19 before and those who have never been caught. Likewise, there is no difference in anxiety scores according to the league levels of the soccer players. However, although there was no difference between player positions in terms of individual anxiety scores and total anxiety scores, it was observed that social anxiety scores changed significantly in player positions.

During the pandemic, fear of the high risk of infection has impacted the coping potential and performance of elite athletes. Accordingly, it is also stated that there is a relationship between decreased performance and increased anxiety (2). Furthermore, it is emphasized in the literature that anxiety reduction techniques such as breathing exercises for physiological anxiety or mental exercise using imagery for cognitive anxiety should be taught to athletes with high anxiety (25). In a study conducted on amateur soccer players during the Covid-19 process, it was found that there was a low level of positive significance between the psychological performance level and situational anxiety levels of amateur soccer players (1). In another study, which included elite soccer players with and without Covid-19, the anxiety levels of soccer players were examined and it was found that the anxiety levels of elite soccer players who had Covid-19 were found to be positively significant compared to those who did not (10). Çiftçi & Demir (3) examined the fear and anxiety levels of professional soccer players playing in Turkish leagues during the social isolation process of the Covid-19 pandemic, and found a statistical

difference between the perceived stress scores of the participants playing soccer in the Super league, TFF 1st league and TFF 2nd league ( $F=3.822$ ;  $p=0.27$ ) and inadequate self-efficacy perception scores ( $F=4.441$ ;  $p=0.16$ ). Though, their study revealed that there was no difference between Covid-19 fear scores and anxiety scores. The scores of the perceived stress scale ( $p<0.05$ ) and inadequate self-efficacy perception subscale ( $p<0.05$ ) of the participants playing soccer in the super league were found to be statistically higher than the participants' playing in the TFF 2nd league. Esteves et al., (8) investigated the anxiety levels in professional soccer teams during the COVID-19 epidemic in their study. They determined that the duration of the application and the experience of the athletes had a negative relationship with the anxiety components. Additionally, it was observed that the levels of state-trait anxiety were high and close to each other, with only a 5% difference between them. In a study conducted in France to investigate differences in anxiety and motivation to return to sports among elite groups of soccer players with different levels and training habits during the COVID-19 quarantine period, athletes were found to have high levels of anxiety during quarantine. Furthermore, it has been reported that soccer players having an injury before the quarantine process started have higher cognitive anxiety scores to return to the soccer matches that will start after the quarantine compared to the players who did not have any injuries (20). During the COVID-19 epidemic, elite soccer players were found to have lower anxiety states compared to non-elite soccer players (5, 6). In another study conducted to determine the anxiety of competition, the anxiety of catching COVID-19 and the relationship between these two in professional soccer players, it was observed that there was a significant relationship between COVID-19 stress and COVID-19 anxiety (14). In the COVID-19 epidemic, it was determined that there was a weak relationship between fear of COVID-19 and competitive anxiety in professional soccer players during the return to competitions (15). In another study, it was examined whether there was a connection between the mean scores of the Covid-19 anxiety scale and the ages of the athletes participating in the study, and as a result of the study, it was seen that young athletes had better psychological skills (22). In another study, it was observed that soccer players playing at professional level were less affected by the factors affecting their anxiety levels as

their age progressed, and it was determined that they could control their emotions better (13).

In conclusion, when the anxiety levels of both the soccer players playing in different leagues and the soccer players having or not caught the corona virus before were examined, it was seen that they had similar anxiety levels, and this situation is thought to be caused by playing soccer at a professional level. Moreover, it is thought that the central midfielders have a lower social anxiety of catching Covid-19 since their movement directions are related to all positions, and thereby, the social characteristics of these players are developed. In other words, their developed social features due to their position have influenced the anxiety of catching Covid-19. In addition, it is thought that goalkeepers have higher social concerns about catching Covid-19, as they are less in touch with other positions due to their position.

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